

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION III

1650 Arch Street  
Philadelphia, Pennsylvania 19103-2029

DEQ-VALLEY

NOV 09 2009

In the Matter of:

O-N Minerals (Chemstone) Company  
Strasburg, Virginia, 22657

TO: \_\_\_\_\_

FILE: \_\_\_\_\_

CAA-03-2010-0019DA

ADMINISTRATIVE COMPLIANCE ORDER  
BY CONSENT

I. STATUTORY AUTHORITY

This Order is issued pursuant to Sections 113(a)(1) and (3) of the Clean Air Act (the "Act"), 42 U.S.C. § 7413(a)(1) and (3). Under Section 113(a)(1) of the Act, the Administrator of the United States Environmental Protection Agency ("EPA" or "the Agency") has the authority to issue Orders requiring persons to comply with the requirements of an applicable State Implementation Plan ("SIP") or permit issued by a state. Under Section 113(a)(3) of the Act, the Administrator of EPA has the authority to issue Orders requiring any person in violation of any other requirement or prohibition of the Act to comply with such requirement or prohibition of the Act. The Administrator has delegated his authority to issue these Orders within the geographical jurisdiction of EPA Region III to the Regional Administrator of EPA Region III, who has re-delegated this authority to the Director of the Air Protection Division of Region III. The geographical jurisdiction of EPA Region III includes the Commonwealth of Virginia.

This Order is issued to O-N Minerals (Chemstone) Company ("O-N" or "Respondent") for its lime production facility in Strasburg, Virginia.

II. FINDINGS OF FACT

1. Oglebay Norton Company owns and operates a lime production facility in or near Strasburg, Virginia, located at 1696 Oranda Road (the "Strasburg Facility"), and operates it under the name O-N Minerals (Chemstone) Company.
2. In February 2008, Oglebay Norton Company was purchased in its entirety by Carmeuse Lime & Stone, Inc., which is a corporation. Respondent in this matter is O-N Minerals

(Chemstone) Company, a corporation organized under the laws of Delaware.

3. Under the authority of Section 114 of the Act, 42 U.S.C. § 7414, representatives of EPA Region III conducted an on-site inspection of the Strasburg Facility on October 16, 2007. In addition, a representative of the Virginia Department of Environmental Quality ("VADEQ") was present during the inspection.
4. Respondent is a "person" within the meaning of Sections 113(a) and 502 of the Act, 42 U.S.C. §§ 7413(a) and 7661a, and as defined in Section 302(e) of the Act, 42 U.S.C. § 7602(e).
5. The Strasburg Facility is classified as a major stationary source, as defined in 9 VAC 5-80-1710(C), because it has the potential to emit more than 100 tons of SO<sub>2</sub> per year. In addition, Respondent has reported SO<sub>2</sub> emissions of greater than 100 tons per year, as well as emissions of other pollutants above major source levels.
6. The Strasburg Facility currently operates a rotary kiln ("Rotary Kiln"), and a hydrator for manufacturing lime and hydrated lime. The Strasburg Facility also has a calcimatic or rotary hearth kiln which was in operation until September 2006. From 1996 through 2001, the Strasburg Facility also operated some of their five vertical kilns. The Strasburg Facility also operates equipment that supports the lime and hydrated lime manufacturing process, including equipment for quarrying raw limestone; preparing limestone for kilns by crushing, sizing, and screening; and miscellaneous crushing, transfer, storage, handling and loadout operations.
7. On August 2, 1973, the former plant owner, Chemstone Corporation – Subsidiary of Engelhard Minerals & Chemicals Corporation, was issued a permit by the Commonwealth of Virginia to construct and operate a rotary lime kiln with concomitant stone supply system and lime storage and loading system at the Strasburg Facility. This is the Rotary Kiln currently in operation.
8. On June 10, 1981, and amended with a letter dated June 22, 1981 containing enclosures, former plant owner, Chemstone Corporation – Subsidiary of Engelhard Minerals & Chemicals Corporation, applied to VADEQ for a permit to modify and operate the Rotary Kiln to combust coal.
9. On September 10, 1981, VADEQ issued a permit to Chemstone Corporation to modify and operate the Rotary Kiln to burn coal, including the construction and operation of coal handling and preparation facilities in accordance with the permit application dated June 10, 1981, as amended by the letter dated June 22, 1981.

10. On April 12, 2000 through April 14, 2000, stack testing was conducted by Air Control Techniques, P.C. for the Rotary Kiln using coal with sulfur content from approximately 0.84% to 1.44%. The SO<sub>2</sub> emissions from the outlet of the Rotary Kiln baghouse averaged 0.46 pounds per hour (lbs/hr) at an average stone feed rate of 46.98 tons per hour (tph). Using this information, an emission factor of 0.01 pounds of SO<sub>2</sub> per ton of stone fed was calculated.
11. Based on this stack test, on July 31, 2000, a minor New Source Review ("NSR") permit was issued to Global Stone Chemstone Corporation by VADEQ to allow an increase in sulfur content up to 1.5% in the coal used to fuel the Rotary Kiln. The Rotary Kiln was previously limited to coal with 1% sulfur.
12. Respondent's predecessor performed certain projects and made certain modifications to the Rotary Kiln between 2000 and 2003, inclusive. Neither a permit application under 9 VAC 5-80-10 nor a permit application under 9 VAC 5-80-1700 et seq. was submitted for the modifications described in paragraphs 13 through 14 below.
13. Between January 2001 and October 2001, the Respondent's predecessor performed certain modifications to the rotary kiln, as described in a document obtained from Respondent labeled "CAR 01-013" (which has been claimed as Confidential Business Information by Respondent) in order to increase production from the kiln. This kiln lengthening project was completed by October 31, 2001.
14. Between January and May of 2003, Respondent's predecessor further modified the rotary kiln, as described in a document obtained from Respondent labeled "CAR Number 03-10104" (which has been claimed as Confidential Business Information by Respondent), by modifying the feed end of the kiln. This rotary feed end modification project was completed by May 31, 2003.
15. The projects described above are modifications as that term is defined at 9 VAC 5-80-10(B).
16. On October 30, 2007, stack testing was conducted by Air Control Techniques, P.C. for the Rotary Kiln. The SO<sub>2</sub> emissions from the Rotary Kiln baghouse was 66.1 lbs/hr at a limestone feed rate of 50 tons per hour ("tph"). Using this information, an emission factor of 1.32 pounds of SO<sub>2</sub> per ton of stone fed was calculated.
17. Based on production data submitted by O-N Minerals in response to EPA's Section 114 letter, and the results of the 2000 and 2007 stack tests, it appears that SO<sub>2</sub> emissions from

the Strasburg Facility increased by greater than 40 tons per year as a result of the projects described above. O-N has not yet submitted evidence of any contemporaneous pollution control projects which would have offset this increase in SO<sub>2</sub> emissions.

18. Following Carmeuse Lime & Stone, Inc.'s purchase of Oglebay Norton Company, the Strasburg Facility's new owner made changes to the manner in which the Rotary Kiln was operated, in addition to some physical improvements. Following these changes, the Rotary Kiln was stack tested in August 2008 by a different stack testing company. The results of that stack testing purports to show that the outlet of the Rotary Kiln baghouse averaged less than 2.60 lbs SO<sub>2</sub>/hr at an average stone feed rate of 51.26 tph. Using this information, an emission factor of 0.05 pounds of SO<sub>2</sub> per ton of stone fed was calculated.
19. On July 29, 2008, EPA issued a Notice of Violation to Carmeuse NA for these and other CAA violations alleged at the Strasburg facility. EPA met with representatives of Carmeuse and O-N Minerals (Chemstone) Company on September 26, 2008, to discuss the violations alleged in EPA's Notice of Violation. Previously, on June 3, 2008, VADEQ issued its own NOV to O-N for similar alleged violations, such as performing a major modification without a permit and exceeding the hourly emission rate for SO<sub>2</sub> which was the basis of a 1981 permit approval by VADEQ. VADEQ's NOV also cited other violations not mentioned in EPA's NOV. Although EPA and VADEQ's enforcement actions have been pursued separately, EPA and VADEQ have coordinated closely to ensure that all applicable violations have been addressed without duplicating efforts, penalties, or corrective actions.

#### CONCLUSIONS OF LAW

20. EPA alleges that the modifications referenced above meet the definition of major modification in 9 VAC 5-80-1710(C) because each is a physical change or change in the method of operation of a major stationary source that resulted in a significant net emissions increase of SO<sub>2</sub>, which is a pollutant subject to regulation under the federal Clean Air Act.
21. EPA alleges that the modifications described above occurred after May 3, 1977, meet the definition of "modification" set forth in 40 C.F.R. § 60.14, and are not subject to the exceptions to the definition of modification at § 60.14, therefore raising the issue of compliance with 40 C.F.R. Part 60, Subpart HH - Standards of Performance for Lime Manufacturing Plants.
22. The Strasburg Facility does not have a continuous monitoring system for opacity as set forth in § 60.343(a). In lieu of a COMS, Respondent has failed to submit any evidence that it was complying with the visible emission monitoring requirement of § 60.343(b).

23. Respondent has failed to submit any semi-annual excess emission reports, as required by § 60.7(c), and does not have a device for measuring the mass rate of stone feed to the Rotary Kiln, as required by § 60.343(d).
24. EPA alleges that the modifications and projects described above also meet the definition of modification at 9 VAC 5-80-10(B), and in the absence of the submission of a PSD application, Respondent is in violation of 9 VAC 5-80-10(C) for failing to obtain a permit to modify and operate the rotary kiln prior to each of these modifications.
25. Respondent neither admits nor denies these findings of fact and conclusions of law.

### ORDER

Based upon the forgoing, under Section 113(a)(4) of the Act, 42 U.S.C. § 7413(a)(4), IT IS DETERMINED AND ORDERED that in order to address the violations listed above, Respondent shall:

26. Upon entry of this Order by EPA, Respondent shall continue to implement the SO<sub>2</sub> CEMS installation plan for the rotary kiln submitted by O-N, discussed by EPA, O-N and VADEQ, and approved by EPA on July 16, 2009 and as amended on October 20, 2009. The final approved SO<sub>2</sub> CEMS installation plan, dated October 20, 2009, is attached to this Order and hereby incorporated by reference into this Order.
27. By March 15, 2010, Respondent shall have completed installation of the SO<sub>2</sub> CEMS, performed CEMS "shakedown," and completed certification and Relative Accuracy Test Audit ("RATA") testing in accordance with 40 C.F.R. § 60.13 and Specification 6.
28. By April 17, 2010, Respondent shall submit a complete and compliant certification/RATA testing report to EPA and VADEQ.
29. If it appears that the March 15, 2010 or April 17, 2010 deadlines listed in paragraphs 27 and 28 above will not be met, Respondent must notify EPA in writing of the cause of the delay, the expected duration of any delay, any measures which Respondent will or could take to decrease the delay, and the date by which Respondent expects to complete the requirements of paragraphs 27 and/or 28 above. This written notification shall be due seven business days after the events which will cause the delay became known or should have become known to Respondent. Provision of written notice to EPA of the delay does not constitute a waiver by EPA of the

deadlines set forth in paragraphs 27 and 28 above, or excuse Respondent in any way from the requirement to comply with those deadlines.

30. Within 90 days of the date of signature of this Order by EPA, or the effective date of the BART permit to be issued by VADEQ, whichever is sooner, any coal used to fuel the Rotary Kiln shall have a maximum sulfur content, when delivered to Respondent's facility, of 1% or less, as measured by ASTM D3177, D4239, or an EPA-approved equivalent method.

31. Within 90 days of the date of signature of this Order by EPA, or the effective date of the BART permit to be issued by VADEQ to Respondent, whichever is sooner, any distillate oil used to fuel the Rotary Kiln must meet the ASTM D396 specification for numbers 1 or 2 fuel oil, and have a maximum sulfur content of no more than 0.5%.

32. Except as noted in this paragraph below, within 90 days of signature of this Order by EPA, Respondent shall be in compliance with all relevant terms of 40 C.F.R. Part 60, subpart HH, including but not limited to the requirement for monitoring visible emissions at least once per day and the requirement to submit semi-annual excess emission reports. Respondent shall conduct performance tests required by 40 C.F.R. § 60.344 within 180 days of entry of this Order by EPA.

33. Within 150 days of signature of this Order by EPA, Respondent shall submit to VADEQ, with a copy to EPA Region III, a complete application Form 7 evaluating the applicability of the Virginia and federal PSD program to all of the pollutants which might have increased (on an annual basis) or otherwise been affected by the modifications to the rotary kiln cited in this Order, related emission increases from support operations, or any other modifications not cited in this Order. If deemed applicable by VADEQ, Respondent shall apply for an NSR/PSD permit no later than one year from the date of EPA's signature of this Order. This language does not preclude VADEQ from requiring Respondent to submit the Form 7 and/or application for an NSR/PSD permit sooner than required by this paragraph.

34. No later than September 10, 2010, Respondent shall achieve an emission rate for SO<sub>2</sub> from the Rotary Kiln of 0.29 lbs per ton of stone feed ("tsf") and 14.7 lbs of SO<sub>2</sub> per hour, calculated as the block average of a 24 hour sampling period. However, if the BART permit to be issued by VADEQ to Respondent is in effect on September 10, 2010, and contains the same SO<sub>2</sub> limits for emissions from the rotary kiln, those limits, including any exceptions in the BART permit to those limits, shall apply as soon as they become effective under the terms of the BART permit and shall supercede the limits set forth in this paragraph.

## V. PARTIES BOUND

35. This Order shall apply to and be binding upon O-N Minerals (Chemstone) Company and the agents, successors, and assigns of these companies, and upon all persons, contractors and consultants acting under or for these companies, or persons acting in concert with these companies who have actual knowledge of this Order or any combination thereof with respect to matters addressed in this Order. No change in ownership or corporate or partnership status will in any way alter O-N Mineral (Chemstone) Company's responsibilities under this Order.

36. In the event of any change in ownership or control of the Strasburg Facility, O-N Minerals (Chemstone) Company shall notify the EPA in writing at least thirty (30) days in advance of such change and shall provide a copy of this Order to the transferee-in-interest of the Strasburg Facility, prior to any agreement for transfer.

#### VI. RESPONSES TO ORDER

37. Information required to be submitted to EPA under this Order must be sent to:

Chief, Air Enforcement Branch  
Air Protection Division,  
U.S. Environmental Protection Agency, Region 3  
1650 Arch St.  
Philadelphia, PA 19103

And

Douglas J. Snyder  
Assistant Regional Counsel  
Office of Regional Counsel (3RC10)  
U.S. Environmental Protection Agency, Region 3  
1650 Arch St.  
Philadelphia, PA 19103

#### VII. EFFECT OF COMPLIANCE ORDER

38. As set forth in Section 113(a)(4) of the Act, 42 U.S.C. § 7413(a)(4), nothing in this Administrative Compliance Order by Consent shall prevent EPA from assessing any penalties, or otherwise affect or limit the United States' authority to enforce other provisions of the Act, or affect any person's obligations to comply with any Section of the Act or with any term or condition of any permit or applicable implementation plan promulgated or approved under the Act. Further, nothing in this Order shall limit or otherwise preclude the United States from taking criminal or additional civil judicial or administrative enforcement action against O-N Minerals (Chemstone) Company or any third parties with regard to the Strasburg Facility

pursuant to any other federal or state law, regulation or permit condition, or for O-N's failure to comply with any requirements of this Order. Nothing herein shall be construed to limit the authority of the EPA to undertake action against any person, including O-N, in response to any condition that EPA determines may present an imminent and substantial endangerment to the public health, public welfare or the environment. EPA reserves any rights and remedies available to it to enforce the provisions of this Order, the Act and its implementing provisions, and of any other federal laws or regulations for which it has jurisdiction following the entry of this Order.

39. For the purposes of this proceeding only, O-N Minerals (Chemstone) Company hereby expressly waives its right to any appeal of this Order which it may have under Section 307(b) of the CAA, 42 U.S.C. § 7607(b), and waives the right to challenge the terms of this Order in any action taken to enforce this Order pursuant to Section 113(b) of the CAA, 42 U.S.C. § 7413(b).

#### VIII. ENFORCEMENT

40. Failure to comply with this Order may result in a judicial or administrative action for appropriate relief, including civil penalties, as provided in Section 113 of the Act, 42 U.S.C. § 7413. EPA retains full authority to enforce the requirements of the Clean Air Act, 42 U.S.C. §§ 7401-7642, and nothing in this Order shall be construed to limit that authority except as otherwise provided herein.

#### IX. CERTIFICATION OF REPORTS

41. Any notice, report, certification, data presentation, or other document submitted by O-N Minerals (Chemstone) Company under or pursuant to this Order, which discusses, describes, demonstrates, or supports any finding or makes any representation concerning O-N Minerals (Chemstone) Company's compliance or non-compliance with any requirement(s) of this Order, shall be certified by a responsible official of O-N Minerals (Chemstone) Company. The term "responsible official" means at least a manager within the O-N Minerals (Chemstone) Company with knowledge of the operations of this facility and delegated authority to sign reports and bind the company.

42. The certification required by the preceding paragraph of this Order shall be in the following form:

Except as provided below, I certify that the information contained in or



accompanying this (type of submission) is true, accurate, and complete. As to (the/those) portion(s) of this (type of submission) for which I cannot personally verify (its/their) accuracy, I certify under the penalty of law that this (type of submission) and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: \_\_\_\_\_

Name(print): \_\_\_\_\_

#### X. EFFECTIVE DATE AND OPPORTUNITY FOR CONFERENCE

43. By signing this Order, O-N Minerals (Chemstone) Company agrees that it has had an opportunity to confer on the terms of this Order with EPA and thereby waives its opportunity pursuant to Section 113(a)(4) to confer further with EPA concerning the violation(s) alleged in the above Order before the Order takes effect. Therefore, this Order shall be effective upon O-N's receipt of a copy of the Order signed by the Director of the Air Protection Division, Region 3, or her designee. This Order shall expire one year after execution of the Order, in accordance with Section 113(a)(4) of the CAA, unless it is terminated sooner by EPA.

#### XI. FAILURE TO PERFORM

44. Except when the notice provisions in paragraph 29 above apply, in the event of an inability or anticipated inability on the part of O-N to perform any of the actions or work required by this Order in the time and manner required herein, O-N shall notify EPA orally within twenty-four (24) hours of such event (or, if the event occurs on a Friday or Saturday, Sunday, or legal holiday, no later than the following business day) and in writing as soon as possible, but in no event more than three (3) days after such event. Such notice shall set forth the reason(s) for, and the expected duration of, the inability to perform; the actions taken and to be taken by O-N to avoid and mitigate the impact of such inability to perform; and the proposed schedule for completing such actions. Such notification shall not relieve O-N of any obligation of this Order. O-N shall take all reasonable actions to prevent and minimize any delay.

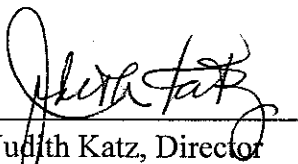
#### XII. BUSINESS CONFIDENTIALITY

45. O-N is entitled to assert a claim of business confidentiality covering all or part of any requested information, in the manner described in 40 C.F.R. § 2.203(b), unless such information is "emission data" as defined in 40 C.F.R. § 2.301(a)(2). Information subject to a claim of business confidentiality will be made available to the public only in accordance with the procedures set forth in 40 C.F.R. Part 2, Subpart B. Unless a confidentiality claim is asserted at the time requested information is provided, EPA may make this information available to the public without further notice to you.

XIII. COPIES OF ADMINISTRATIVE COMPLIANCE  
ORDER BY CONSENT

A copy of this Order will be sent to Michael Dowd and Amy Thatcher Owens of the Virginia Department of Environmental Quality.

Dated: 11/02/09, 2009

  
Judith Katz, Director  
Air Protection Division  
U.S. Environmental Protection Agency  
Region III

The undersigned represents that he or she is a duly authorized representative of O-N Minerals (Chemstone) Company for the purpose of signing this Order, and that O-N agrees to the terms of this Order.

Dated: October 19, 2009

A handwritten signature in black ink, appearing to read 'K. Whyte', written over a horizontal line.

Kevin J. Whyte  
Vice-President and General Counsel